

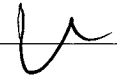
Work Order ID 130177

130177

Page 1

February-26-15 8:51:37 AM

Item ID: D066-1004-011 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: R66 Primary Hook
 Start Date: 2/26/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 2/26/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference: rework - ECN15-523

Approvals: Process Plan:  Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
IIN-D066-1004	C								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D066-1004-011		CHG003						

MCS 15-03-13
 DAS
 46
 9-89 MAR 16 2015

105		0.00							
105									
Small Fab	Memo	0.00							
Small Fab	PULL FROM STK: 1 X D066-1004-011 B128780								
	REWORK PER ECN15-523								
	REMOVE D5010-5 ON THE D4983-041 ASSY - REPLACE WITH NEW D5010-5 B130080								

1 FF FEB 26 2015

Work Order ID 130177

February-26-15 8:51:37 AM

130177

Page 2

Item ID: D066-1004-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: R66 Primary Hook

Stop ***NS2***

Start Date: 2/26/15 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/26/15 Req'd Qty: 1.00

1

Customer:

Reference: rework - ECN15-523

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

108

QC5- Inspect part completeness to step on W/O

0.00

108

QC

Memo

0.00

Quality Control

DAS
9
9-89

① 15-03-03

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

REMOVE D5051-1
DISCARD/SCRAPREPLACE WITH
D5051-041 B 1298A68-6
88
577

MAR 16 2015

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

DAS
46
9-89

MAR 16 2015

Work Order ID 130177

February-26-15 8:51:37 AM

130177

Page 3

Item ID: D066-1004-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: R66 Primary Hook

Stop

NS2

Start Date: 2/26/15 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/26/15 Req'd Qty: 1.00

1

Customer:

Reference: rework - ECN15-523

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							DAS 05 9-89
Packaging	REPACKAGE USING NEW B/N CHG003 Identify and pack for shipping as per PPP D066-1004-011 Location: <u>FL0029</u> PPP Rev: _____								MAR 16 2015
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							MCS 1503-17
Quality Control									

Picklist Print

February-26-15 8:51:36 AM

Page 1

Work Order ID: 130177

130177

Parent Item: D066-1004-011

D066-1004-011

Parent Item Name: R66 Primary Hook

Start Date: 2/26/15

Required Date: 2/26/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 14.04.24 ECN14-520 DD verf:JLM IPP Rev:B
14.11.18 now @ chg 002 per ecn14-650 DDverf:JLM IPP Rev:C 14.12.01 IIN-
REVB per ecn14-657 DD verf:JLM IPP Rev:D 15.02.24 chg 003 per
ecn15-523 DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D066-1004-011

Manufactured

No

Each

2.0000

1

D066-1004-011

R66 Primary Hook

**

15.02.26

Location

Loc Qty

Loc Code

FG

2

128780

2

D5010-5

Purchased

No

Each

9.0000

0

D5010-5

Interface Block

**

FF

FEB 26 2015

Location

Loc Qty

Loc Code

ST144

9

130080

9

D5051-041

Manufactured

No

Each

14.0000

1

D5051-041

Cyclic Switch Housing Assembly

**

DAS
06
9-89

MAR 13 2015

Location

Loc Qty

Loc Code

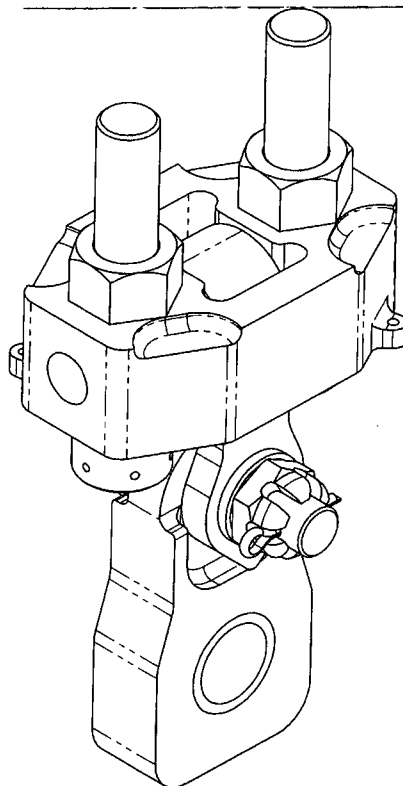
ST144

14

129817

14

DAS
46
9-89



D5010-041 HOOK INTERFACE ASSY

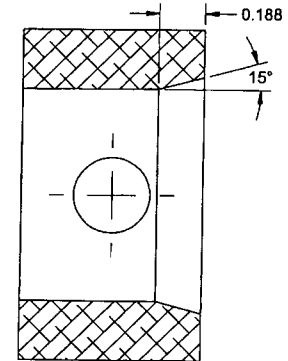
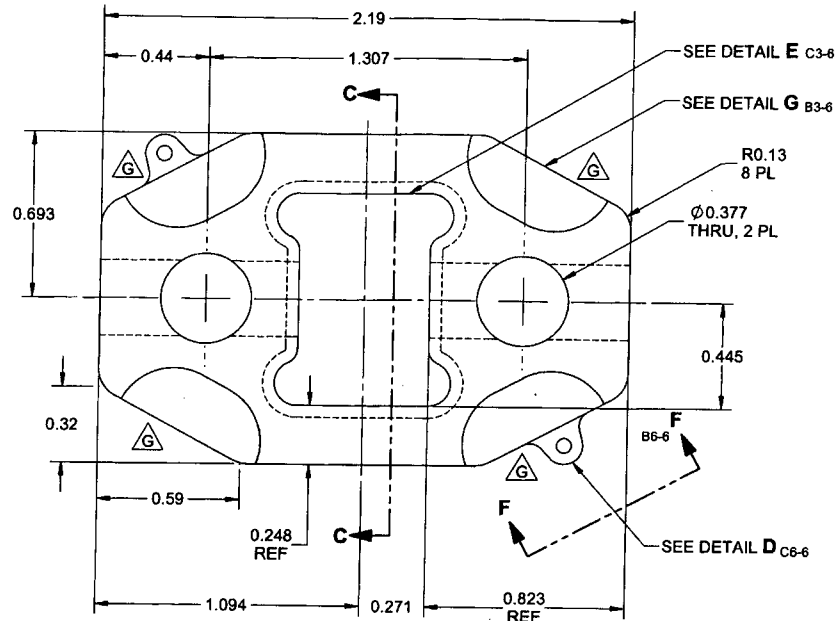
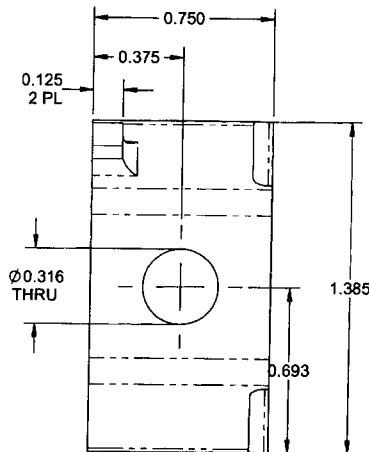
W/O 130177

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2015 FEB 23
ECN 15-513 4P

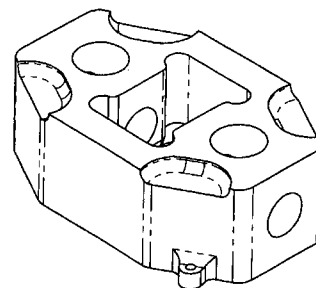
G	REVISED D5010-5 (ZN C4-5). REVISED DETAIL G (ZN B3-6). RE-ARRANGED DETAIL VIEWS IN SHEET 6 AND ADDED SHEET 7. REF NCR15-4575	AK	15.02.05
F	MULTIPLE DIMENSIONS UPDATED AND FEATURES ADDED FOLLOWING FIRST INSTALLATION. AN310C5 NUT WAS NASM310C5.	AJS	14.05.13
E	ADDED -7. ITEM 9 WAS 1/4" BOLT MULTIPLE DIMENSIONS UPDATED ACCORDINGLY. ITEM 8 WAS D5013-3.	AJS	14.04.23
D	MULTIPLE FEATURES UPDATED POST TESTING SEE PREVIOUS REVISION FOR DETAILS.	AJS	14.04.01
C	PARTS LIST: ITEM 5 WAS D5013-7, ADDED ITEM 7 ITEM 12 WAS NAS1351-6H33P. REASON: DRAFTING ERRORS.	AJS	14.03.13
B	SHT 1 PL NAS1351-6H33P WAS NAS1351-H339. REASON: DRAFTING ERROR.	AJS	14.02.20
A	NEW ISSUE	AJS	14.01.23
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO.	REV. G
MFG. APPR.	JLM	D5010	SHEET 1 OF 7
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	HOOK INTERFACE ASSY	NTS
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SECTION C-C

D5010-5 INTERFACE BLOCK



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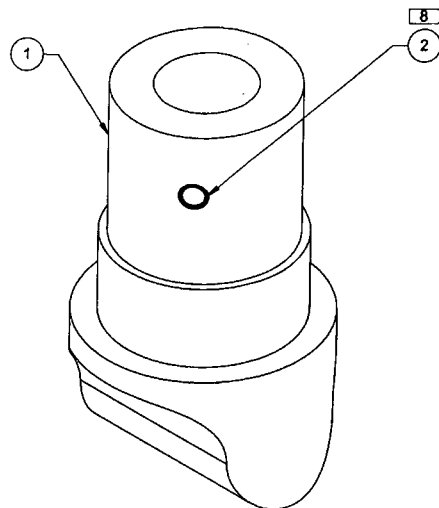
NOTES:

- 1) MATERIAL: 17-4 PH STAINLESS STEEL, H900 CONDITION
MIN UTS = 170 KSI (38 HRC)
PER AMS 5643 OR ASTM A564
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.7
- 7) WEIGHT: 0.37 lbs

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DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO.	REV. G
MFG. APPR.	JLM	D5010	SHEET 5 OF 7
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	HOOK INTERFACE ASSY	NTS
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ITEM	QTY	P/N	DESCRIPTION
	X	D5051-041	CYCLIC SWITCH HOUSING ASSY
1	1	D5051-1	CYCLIC SWITCH HOUSING
2	1	MS21209C0810	HELICOIL



D5051-041 CYCLIC SWITCH HOUSING ASSY

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2015 FEB 23

ECN 15-523

NOTES:

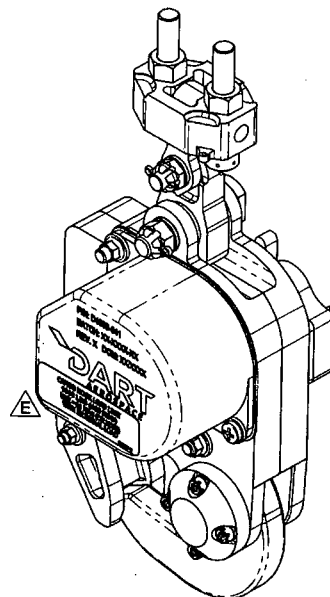
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D5051-041" AND B/N BXXXXX USING A MARKED BAG PER QSI 044 6.7
- 7) WEIGHT: 0.07 lbs
- 8) INSTALL HELICOIL AFTER FINISH

C	ADDED BOM (ZN D7-1). ADDED D5051-041 (ZNB5-1). ADDED NOTE 8 (ZN A8-1). ADDED SHEET 2. REVISED HOLE POSITION (ZN C3-2). REF NCR15-4575.	AK	15.02.04
B	REDESIGNED BASED ON TCCA PILOT FEEDBACK AND TO INCORPORATE SMALLER SWITCH.	ML	14.08.24
A	NEW ISSUE	ML	14.01.28
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO.	REV. C
MFG. APPR.	JLM	D5051	SHEET 1 OF 2
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CYCLIC SWITCH HOUSING	NTS
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ITEM	QTY	P/N	DESCRIPTION
	X	D4983-041	CARGO HOOK ASSY
1	1	D4984-041	HOOK SIDE PLATE ASSY
2	1	D4985-041	HOOK SIDE PLATE ASSY
3	1	D4986-1	CARGO HOOK LOCK
4	2	D4987-1	DUST SHIELD
5	1	D4988-1	KEEPERLESS ADAPTOR
6	1	D4989-1	LATCH SHAFT
7	1	D4990-041	ACTUATOR ASSEMBLY
8	1	D4991-1	LATCH ROLLER PIN
9	1	D4992-1	LATCH ROLLER
10	1	D4993-1	LATCH ROLLER DU BEARING
11	1	D4994-1	LATCH
12	2	D4995-1	ACTUATOR BUSHING
13	1	D4996-041	HOOK ASSEMBLY
14	1	D4997-1	LOAD BEAM BUMPER
15	2	D4998-1	LOCK BUMPER
16	1	D4999-1	CLOCK SPRING COVER
17	1	D5000-1	CLOCK SPRING
18	1	D5001-1	LOCK SPRING
19	2	D5002-1	LINK PIN
20	1	D5003-1	LINK
21	1	D5005-1	SOLENOID COVER GASKET
22	1	D5006-1	SOLENOID COVER
23	1	D5007-1	MANUAL RELEASE COVER
24	1	D5009-1	ACTUATOR SPRING
25	1	D5010-041	HOOK INTERFACE ASSY
26	1	D5011-041	HOOK SOLENOID ASSY
27	2	D5013-3	BUSHING
28	1	D5020-1	WIRE GUIDE/GRIP
29	1	D5044-1	DOWEL PIN
30	2	D5044-3	DOWEL PIN
31	2	D5045-1	SPLIT DU BEARING
32	1	D5056-1	HOOK PIN
33	2	D5057-1	NYLON WASHER
34	2	D5057-3	NYLON WASHER
35	1	D5065-1	HOOK MANUAL RELEASE LEVER
36	1	D5066-1	PLACARD
37	1	D5066-5	PLACARD

ITEM	QTY	P/N	DESCRIPTION
38	1	AN3C15A	BOLT
39	1	AN310C6	NUT, CASTELLATED
40	2	AN4C15A	BOLT
41	1	AN4C17A	BOLT
42	2	MS16624-4028	RETAINING RING
43	4	MS16624-5012-1	RETAINING RING
44	1	MS171532	SPRING PIN
45	3	MS21043-3	NUT, SELF-LOCKING
46	3	MS21043-4	NUT, SELF-LOCKING
47	1	MS24665-153	COTTER PIN
48	1	MS24694-C7	SCREW, CSK 100°
49	8	MS24674-9	SOCKET HEAD CAP SCREW
50	1	MS27039C1-08	SCREW, PAN-HEAD
51	4	MS35338-137	LOCK WASHER
52	5	NAS1149C0363R	WASHER
53	6	NAS1149C0463R	WASHER
54	1	NAS1149C0663R	WASHER
55	1	NAS1149C0863R	WASHER
56	1	D5116-5	WIRE M22759/41-14-9
57	1	D5116-7	WIRE M22759/41-14-9
58	1	1-480319	CONNECTOR
59	1	XPF-1/8	EXPANDABLE SLEEVE - 48" LONG
60	2	BT1.5I-M	TIE WRAP



D4983-041 CARGO HOOK ASSY

NOTES:

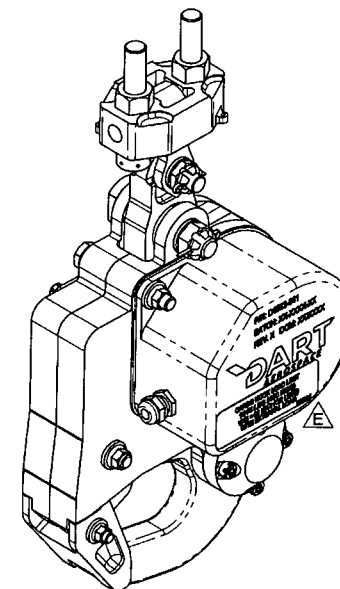
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: LASER ETCH P/N D4983-041, BATCH XX-XXXX-XX, REV. X, DOM XX/XXXX
LOCATE APPROX AS SHOWN USING APPROX LETTERING HEIGHT
AS SHOWN. PER DART EUGENE SPEC QMSI-6.2.2.

- 7) WEIGHT: 5.50 lbs
- 8) WIRING INSTALLATION PER AC43.13-1B CHAPTER 11

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2015 FEB 23

ECN 15-923 4P

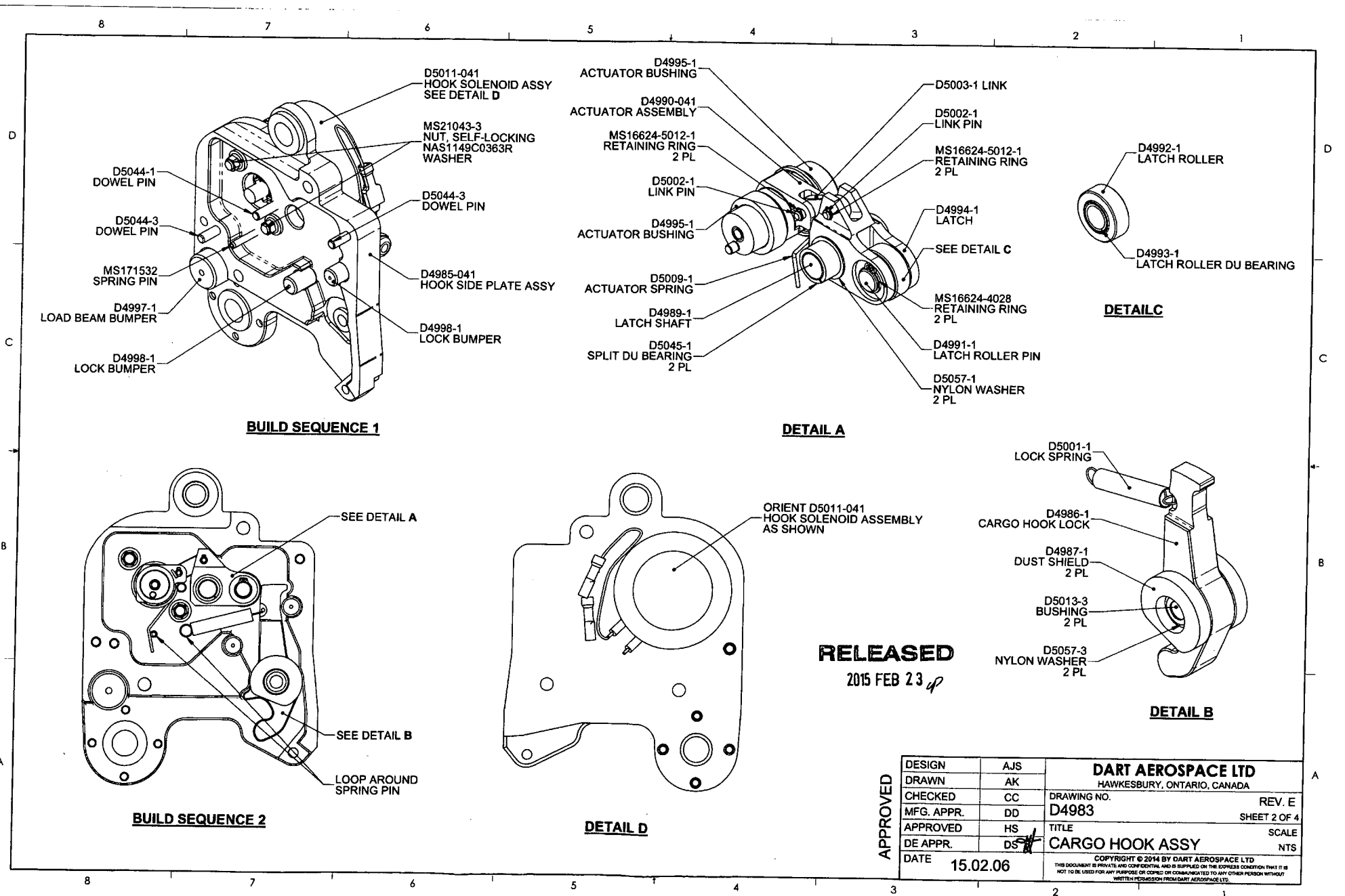


E	ADDED ITEMS 56, 57, 58, 59, 60 TO BOM (ZN C5-1). ADDED NOTE 8 (ZN A8-1). UPDATED D5066-5 PLACARD (ZN A5-1, C2-1 AND C4-3). ADDED SHEET 4 (BUILD SEQUENCE 4).	AK	15.02.06
D	ITEM 50 WAS MS27039C0814 (DRAFTING ERROR). ADDED NOTE 6.	AJS	14.12.15
C	PICTORIAL UPDATE FOR CHANGES TO D5010-041 SUB ASSY. PICTORIAL UPDATE TO ITEM 28. ADDED ITEM 37 & 38. QTY FOR ITEM 44 WAS 4 (-9 DELETED). REDESIGNED D4985-041, D5007-1 AND D5065-1 AND UPDATED RELATED HARDWARE LENGTHS. ALL NASM HARDWARE REPLACED WITH ANMS HARDWARE.	AJS	14.06.24
B	SHT 1 PARTS LIST: ITEM 42 WAS -151, ADDED ITEM 43. QTY FOR ITEM 44 WAS 8. ITEM 47 PART NUMBER WAS NAS1149C0832R. ITEM 51 PART NUMBER WAS NAS1149C0816R. ITEM 52 PART NUMBER WAS NASM24694-C4. REASON: DRAFTING ERROR.	AJS	14.03.13
A	NEW ISSUE	AJS	14.02.18
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AK		
CHECKED	CC		
MFG. APPR.	DD		
APPROVED	HS		
DE APPR.	D9		
DATE	15.02.06		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4983**
TITLE **CARGO HOOK ASSY**
REV. E
SHEET 1 OF 4
SCALE
NTS

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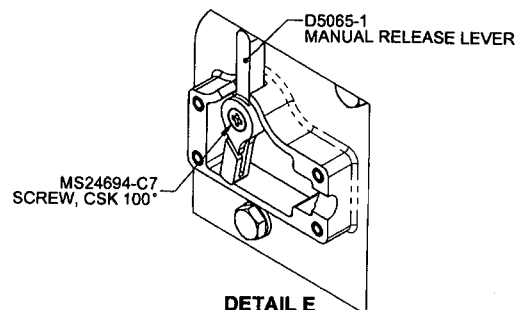
2015 FEB 23

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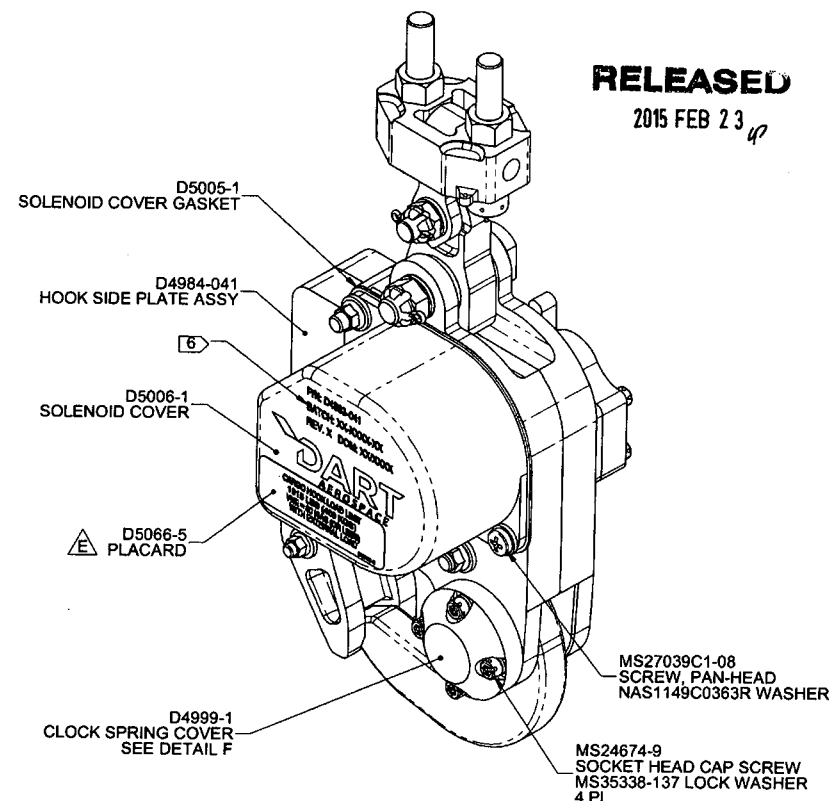
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DRAWN	AK		
CHECKED	CC	DRAWING NO.	REV. E
MFG. APPR.	DD	D4983	SHEET 2 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CARGO HOOK ASSY	NTS
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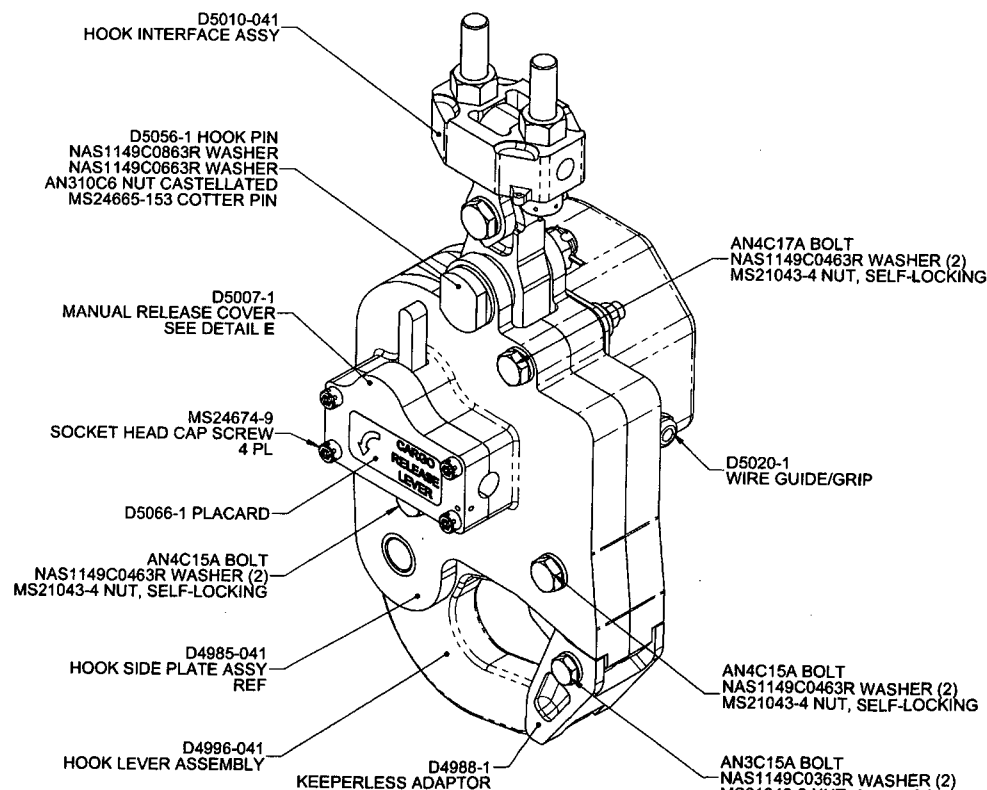
2015 FEB 23



DETAIL E



DETAIL F



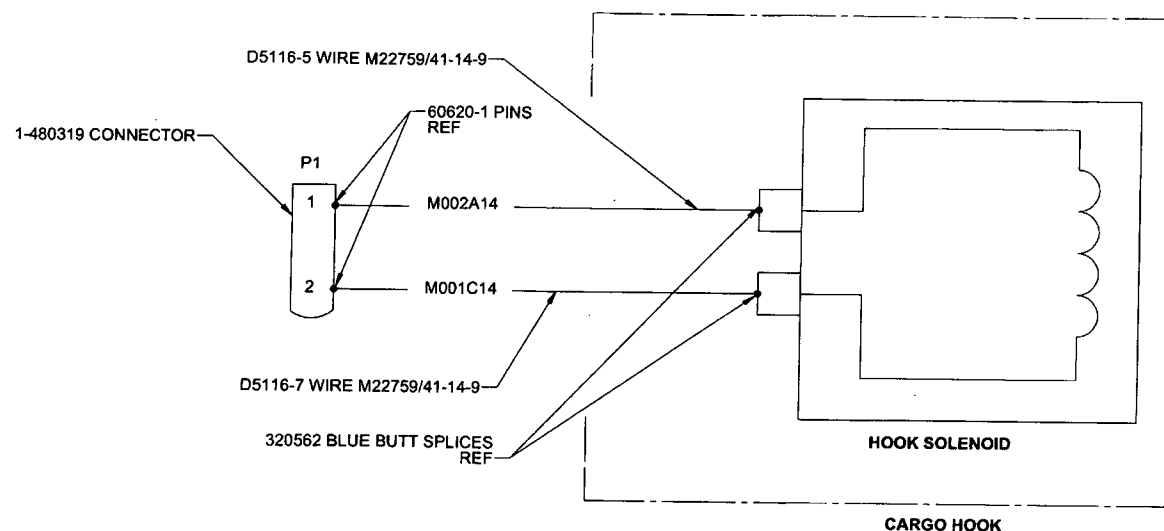
BUILD SEQUENCE 3

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DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	CC	DRAWING NO.	REV. E
MFG. APPR.	DD	D4983	SHEET 3 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CARGO HOOK ASSY	NTS
DATE	15.02.06	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

BUILD SEQUENCE 4 INSTRUCTIONS:

1. REMOVE D5006-1 SOLENOID COVER
2. INSTALL PINS ON THE D5116-5/-7 WIRES TO THE 1-480319 CONNECTOR. SEE FIGURE BELOW FOR DETAILS
3. INSTALL XPF-1/8 EXPANDABLE SLEEVE AT THE CONNECTOR END AROUND D5116-5/-7 WIRES AND SECURE USING A SMALL TIE WRAP
4. INSTALL D5116-5/-7 WIRES AND XPF-1/8 EXPANDABLE SLEEVE THROUGH D5020-1 WIRE GUIDE/GRIP ON THE SOLENOID COVER
5. INSTALL TIE WRAP ON EXPANDABLE SLEEVE AND WIRES INSIDE D5006-1 SOLENOID COVER
6. CONNECT D5116-5/-7 WIRES TO SOLENOID WIRES USING 320562 BLUE BUTT SPLICES
7. RE-INSTALL D5006-1 SOLENOID COVER
8. TIGHTEN D5020-1 WIRE GUIDE/GRIP



BUILD SEQUENCE 4

RELEASED

2015 FEB 23 *dp*

APPROVED	DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AK		
	CHECKED	CC	DRAWING NO.	REV. E
	MFG. APPR.	DD	D4983	SHEET 4 OF 4
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	CARGO HOOK ASSY	NTS
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